[4910-13-P]

### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2014-0216; Directorate Identifier 2013-SW-045-AD;

Amendment 39-17818; AD 2014-07-04]

**RIN 2120-AA64** 

Airworthiness Directives; Sikorsky Aircraft Corporation (Sikorsky) Helicopters

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for Sikorsky Model S-92A helicopters. This AD requires, initially and each time the clamps are removed, inspecting for chafing between the electrical wires and the hydraulic lines and, if there is chafing between the wires or lines, before further flight, replacing the unairworthy wires or lines with airworthy wires or lines. Also, this AD requires inspecting each clamp for correct installation, and if a clamp is incorrectly installed or missing, before further flight, correctly installing the clamps. This AD is prompted by chafing between high voltage electrical wiring and hydraulic lines that led to two fires in the top deck of the helicopter, which does not have fire detection nor extinguishing capability. The actions specified by this AD are intended to detect any chafing between the electrical wires and the hydraulic lines that could result in a fire and subsequent loss of control of the helicopter.

**DATES:** This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain document listed in this AD as of [INSERT DATE 15 days AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- <u>Federal eRulemaking Docket</u>: Go to <u>http://www.regulations.gov</u>. Follow the online instructions for sending your comments electronically.
  - Fax: 202-493-2251.
- <u>Mail:</u> Send comments to the U.S. Department of Transportation, Docket
   Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey
   Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the "Mail" address between 9 a.m. and 5 p.m.,
   Monday through Friday, except Federal holidays.

# **Examining the AD Docket**

You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, any incorporated by reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this AD, contact Sikorsky Aircraft
Corporation, Customer Service Engineering, 124 Quarry Road, Trumbull, CT 06611;
telephone 1-800-Winged-S or 203-416-4299; email <a href="mailto:sikorskywcs@sikorsky.com">sikorskywcs@sikorsky.com</a>.
You may review the referenced service information at the FAA, Office of the Regional
Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. **FOR FURTHER INFORMATION CONTACT:** Caspar Wang, Aviation Safety
Engineer, Boston Aircraft Certification Office, Engine & Propeller Directorate, FAA, 12
New England Executive Park, Burlington, Massachusetts 01803; telephone (781)
238-7799; email caspar.wang@faa.gov.

#### **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this

rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

### **Discussion**

We are adopting a new AD for Sikorsky Model S-92A helicopters. This AD requires, initially and each time the clamps are removed, inspecting for chafing between the electrical wires and the hydraulic lines and, if there is chafing between the wires and lines, before further flight, replacing the unairworthy wires or lines with airworthy wires or lines. Also, this AD requires inspecting each clamp for correct installation, and if a clamp is incorrectly installed or missing, before further flight, correctly installing the clamps.

This AD is prompted by chafing between high voltage electrical wires and hydraulic lines that led to two fires in the top deck of the helicopter, which does not have fire detection nor extinguishing capability. The chafing occurred because of improper clamp installation after maintenance was performed in the top deck. A redesign eliminated the need for clamping in newer Model S-92A helicopters. However, because of the high volume of maintenance performed in the area where the fire occurred immediately following maintenance involving removing and installing the clamps, more detailed instructions are necessary for correct installation of the clamps in the older model helicopters. The actions specified by this AD are intended to detect any chafing between the electrical wires and the hydraulic lines that could result in a fire and subsequent loss of control of the helicopter.

### **FAA's Determination**

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other helicopters of the same type design.

### **Related Service Information**

Sikorsky has issued Alert Service Bulletin No. 92-20-001, dated October 27, 2005 (ASB) to specify a one-time installation of clamps to provide additional clearance between the electrical harnesses on the upper deck and the hydraulic lines.

## **AD Requirements**

This AD requires:

- Within 5 hours time-in-service (TIS), inspecting the electrical wires and the hydraulic lines in the affected area for evidence of chafing. If there is chafing between electrical wires and the hydraulic lines, this AD requires, before further flight, replacing unairworthy wires or lines with airworthy wires or lines.
- Within 5 hours TIS, inspecting each clamp for correct installation. If clamps are incorrectly installed or missing, before further flight, install clamps by following the Accomplishment Instructions of the ASB
- After each maintenance that requires removing clamps, this AD requires repeating the previous inspections.

## Differences between this AD and the Service Information

The service information specifies a one-time installation of the clamps between the electrical harnesses on the upper deck and the hydraulic lines within 30 days. This AD requires, within 5 hours TIS, inspecting each clamp for correct installation, and within 5 hours TIS and after each maintenance that requires removing clamps, inspecting the electrical wires and the hydraulic lines for chafing. This AD applies to S/N 920006 through 920084, and the service bulletin applies to S/N 920006 through 920022.

### **Interim Action**

We consider this AD interim action. The design approval holder is currently developing a modification that will address the unsafe condition identified in this AD. Once this modification is developed, approved, and available, we might consider additional rulemaking.

## **Costs of Compliance**

We estimate that this AD will affect 20 helicopters of U.S. Registry.

We estimate that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at \$85 per work hour. An initial inspection of the clamps will take .5 work hour. Inspecting and reclamping will take 2 work hours at a parts cost of \$25 per helicopter. Inspecting and replacing the electrical wires will take 2 work hours at a parts cost of \$7,500 per helicopter. Inspecting and replacing the hydraulic lines will take 3 work hours at a parts cost of \$500 per helicopter. Based on these estimates, the total cost per helicopter is \$8663, and the total cost of compliance for the U.S. fleet is \$173,250, assuming the clamps, electrical wires, and hydraulic lines are replaced.

According to Sikorsky's service information, the costs of this AD may be covered under warranty thereby reducing the cost impact on affected individuals. We do not control warranty coverage by Sikorsky. Accordingly, we have included all costs in our cost estimate.

### FAA's Justification and Determination of the Effective Date

Providing an opportunity for public comments before adopting these AD requirements would delay implementing the safety actions needed to correct this known unsafe condition. Therefore, we find that the risk to the flying public justifies waiving notice and comment before adopting this rule because the required corrective actions must be done within 5 hours TIS, a very short time period based on the average flight-hour utilization rate of these helicopters.

Since an unsafe condition exists that requires the immediate adoption of this AD, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in less than 30 days.

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

# **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- Is not a "significant rule" under DOT Regulatory Policies and Procedures
   (44 FR 11034, February 26, 1979);
- 3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

# **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

# § 39.13 [Amended]

The FAA amends § 39.13 by adding the following new airworthiness directive
 (AD):

2014-07-04 **SIKORSKY AIRCRAFT CORPORATION:** Amendment 39-17818; Docket No. FAA-2014-0216; Directorate Identifier 2013-SW-045-AD.

# (a) Applicability

This AD applies to Model S-92A helicopters, serial numbers 92006 through 920084, certificated in any category.

# (b) Unsafe Condition

This AD defines the unsafe condition as an installation that does not provide adequate clearance to prevent chafing between the high voltage electrical wires and hydraulic lines. This condition could result in fire and subsequent loss of control of the helicopter.

# (c) Effective Date

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

# (d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

# (e) Required Actions

(1) Within 5 hours time-in-service, inspect the electrical wires and the hydraulic lines in the upper deck of the helicopter for chafing between electrical wires and

hydraulic lines. If there is chafing between electrical wires and hydraulic lines, before further flight, replace the unairworthy wires or lines with airworthy wires or lines.

- (2) Within 5 hours TIS, inspect each clamp for correct installation as shown in Figures 1 through 14 of Sikorsky Aircraft Corporation Alert Service Bulletin No. 92-20-001, dated October 27, 2005 (ASB). If clamps are incorrectly installed or missing, before further flight, install clamps by following the Accomplishment Instructions, paragraph 3.A.(4) through 3.A.(17) of the ASB.
- (3) After each maintenance that requires removing clamps, comply with paragraphs (e)(1) and (e)(2) of this AD.

# (f) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Boston Aircraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Caspar Wang, Aviation Safety Engineer, Boston Aircraft Certification Office, Engine & Propeller Directorate, FAA, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (781) 238-7799; email <a href="mailto:caspar.wang@faa.gov">caspar.wang@faa.gov</a>.
- (2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

# (h) Subject

Joint Aircraft Service Component (JASC) Code: 2910 Main Hydraulic System.

# (i) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (i) Sikorsky Aircraft Corporation Alert Service Bulletin No. 92-20-001, dated October 27, 2005.
  - (ii) Reserved.
- (3) For Sikorsky Aircraft Corporation service information identified in this AD, contact Customer Service Engineering, 124 Quarry Road, Trumbull, CT 06611; telephone 1-800-Winged-S or 203-416-4299; email <a href="mailto:sikorskywcs@sikorsky.com">sikorsky.com</a>.
- (4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.
- (5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call (202) 741-6030, or go to:

http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Fort Worth, Texas, on March 28, 2014.

Kim Smith,

Directorate Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2014-07672 Filed 04/15/2014 at 8:45 am; Publication Date: 04/16/2014]